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ASSESSMENT REPORT

on

PROSPECTING, GEOLOGICAL MAPPING & ROCK GEOCHEMISTRY

JACLEG PROPERTY

Lewis Creek / Wolf Creek Area
Fort Steele Mining Division

TRIM 82G.072 & 082
5520000N 597000E

by

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1.00 INTRODUCTION

1.10 Location and Access

The JacLeg Property is located in southeastern British Columbia in the Fort Steele Mining Division along the lower western edge of the Rocky Mountains, on the eastern edge of the Rocky Mountain Trench and is centered immediately west of Lazy Lake, approximately at UTM coordinates 55,200,000N, 597,000E. It covers the area between Wolf Creek in the north and Lewis Creek in the south, as well as some immediately adjacent ground to the north and south. The property covers a number of old and newly discovered mineralized showings.

Access is via road from Wasa Lake, along either the Lewis Creek road or the Wolf Creek road. Numerous bush tracks also cross the property; as it is used for ranching and Christmas tree cutting.

1.20 Property

The Jacleg property includes the Jacleg 1 to 17 and Goldylot 1 to 4 mineral claims, a contiguous block of 114 claim units in six 4-post and fifteen 2-post mineral claims (Fig.2). The Jacleg claims are registered in the name of SuperGroup Holdings Ltd. of Cranbrook B.C. while the Goldylot claims are registered in the name of M. C. Kennedy of Kimberley, B.C.

1.30 Physiography

The Jacleg property is situated on the immediate east side of the Rocky Mountain Trench, on the westernmost flank of the Hughes Range of the Rocky Mountains. Small segments of the property extend onto the steep western-most slopes of the Rocky Mountains to the east. Elevations range from 850 to 1300 meters with most of the property between 900 and 1100 meters. The narrow stream valleys of southwest flowing Wolf Creek and Lewis Creek both cross the property.

1.40 History

The Jacleg and Goldylot claims cover a number of old workings that include small trenches, shallow shafts and short adits. In 1970 Texas Gulf Sulfur staked a 32 unit claim block in the area and conducted geological mapping and took 75 soil samples (Gifford, 1971, AR 3092). In 1992 INCO Exploration staked a larger claim block called the 'Lewis Creek Property', which covered part of the area of the present Jacleg property. INCO was interested in copper mineralization, particularly low sulfur copper mineralization such as chalcocite and bornite, and their work included geological mapping and a large soil sampling grid. They apparently did not analyze the soil samples for gold. INCO's work is reported on by Rawick and Rush, 1994 (Assessment Report 23,115).

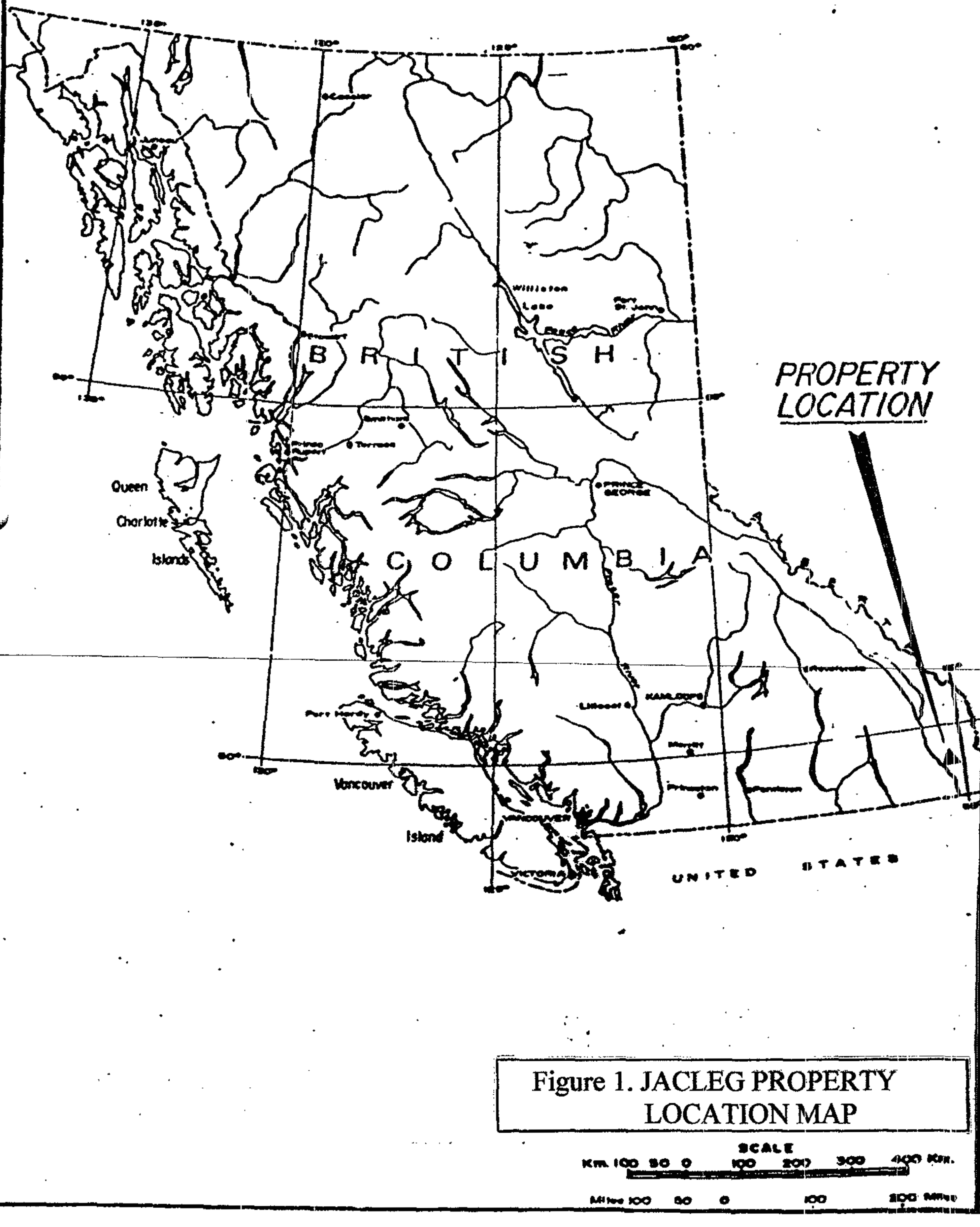

Figure 1. JACLEG PROPERTY
LOCATION MAP

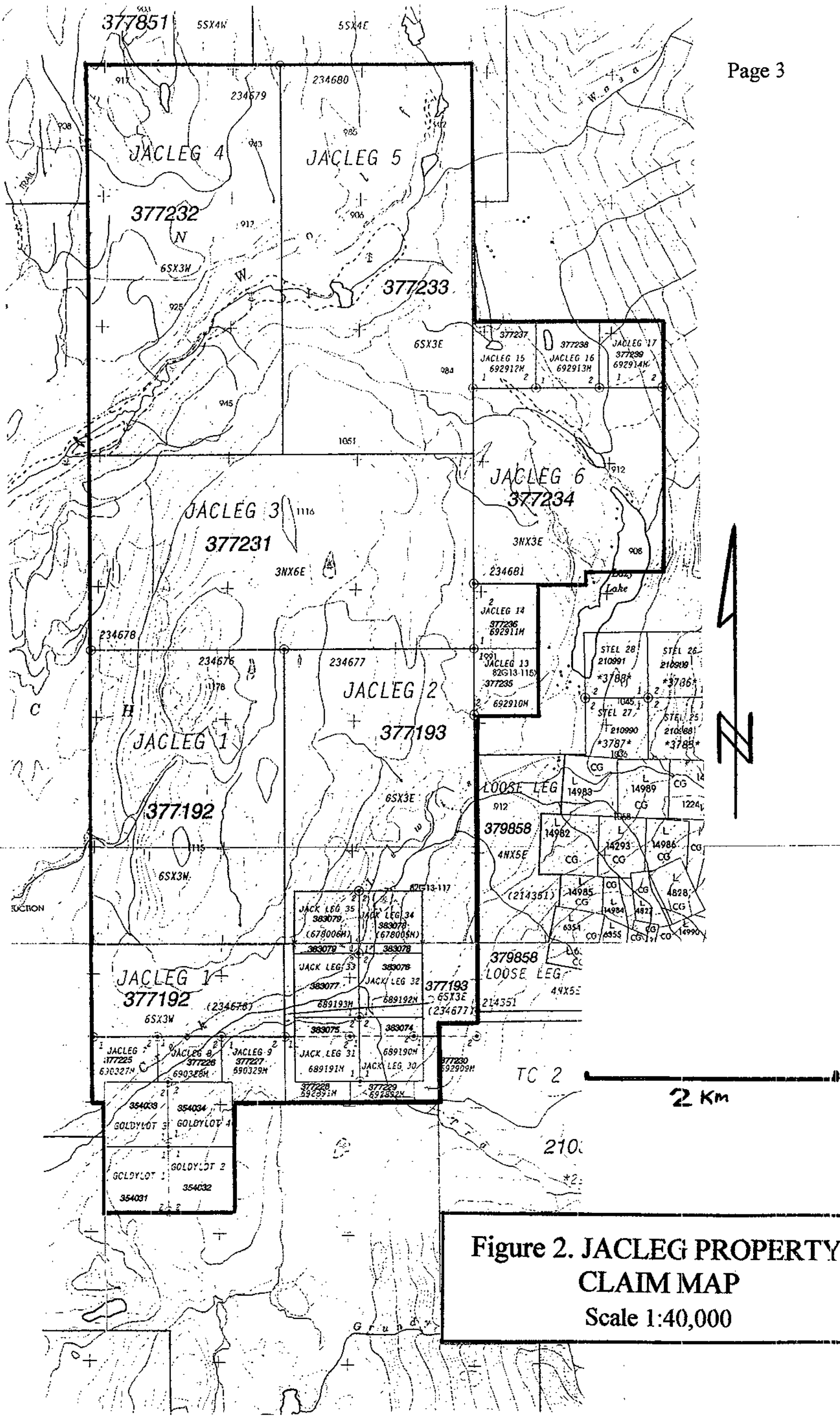

Figure 2. JACLEG PROPERTY CLAIM MAP
Scale 1:40,000

In 1997 the four unit Goldylot claim block, at the southern edge of the Jacleg claims, was staked to cover old workings developed on a zone of strong silicic alteration and associated gold-copper mineralization.

1.50 Scope of Present Program

In 2001 prospecting was conducted over much of the Jacleg and Goldylot claims and detailed geologic mapping was undertaken on two portions of the property where previous workers had identified gold and copper mineralization and had dug small trenches, adits and shafts. A total of 131 rock samples were collected and analyzed as part of the prospecting and geological mapping programs.

2.00 PROSPECTING

During the late fall of 1999 and early spring of 2000 a reconnaissance prospecting pass was made over the area which would become the Jacleg claim group. The focus of this initial work was to evaluate the potential for gold mineralization associated with known copper occurrences in the Fort Steele formation. The success of this initial program led to the staking of the Jacleg claims and the follow-up prospecting which this report addresses.

The potential for copper deposits within the Fort Steele has been recognized by a number of exploration companies who conducted exploration programs in or near the area of the Jacleg claims over the past 50 years. The most recent group, INCO, looked at the area during the mid 1990's. Their conclusion was that the sedex copper potential was limited, with existing mineralization being related to structures and sweats created by the emplacement of diorite - gabbro sills and dikes. Their mapping indicated a sharp contrast in diorite - gabbro sill occurrences on either side of the Lewis Creek Fault. This is strong evidence that the Lewis Creek Fault is a growth fault active during deposition of the Precambrian Aldridge basin. Old fault zones similar to the Lewis Creek in character in other areas of the district host numerous interesting gold mineralization occurrences. These include the St. Mary, Cranbrook, McNeil, Palmer Bar, Perry and Old Baldy faults, all of which are postulated to be ancient in origin. One common feature of these structures is the existence of multiple parallel sympathetic shears which can reach impressive widths up to 1 km. The areas of greatest width are thought to occur near or at the intersection points with other faults.

Initial prospecting had focused around existing copper occurrences with emphasis placed on sampling iron pyrite (limonite) -rich quartzite and narrow quartz vein zones and breccias, with or without copper mineralization. The results of the recce work seemed to indicate a direct correlation between gold mineralization and quartz vein alteration. With this understanding the claim group was staked and a more aggressive prospecting program initiated. The following features of interest were noted during this program:

1) Mineralization
2) Multiple intrusive activity
3) Alteration
4) Complex structure
5) Stratigraphy

1) Mineralization

All traverses encountered patches and zones of limonitic pyrite mineralization. This type of mineralization occurs in coarse white-gray quartzite, with or without quartz veining or brecciation. This mineralization type is not rare in the Jacleg claim area. Copper mineralization associated with the above usually occurs in quartz veins, breccias, or strongly sheared zones. The copper mineralization is weak, recognized by malachite staining or disseminated grains and blebs of chalcopyrite. One area of strong malachite staining had disseminations of chalcocite along with chalcopyrite crystals. The stronger zones of mineralization have brown or white calcite and rare pink dolomite, along with occasional flecks of specular hematite. Lead mineralization was also noted on some of the traverses with the galena occurring as grains in quartz and most commonly associated with copper mineralization. An area of interest where galena is dominant over copper exists on traverses #9 and #10; this area is interpreted to be close to the contact between quartzites and overlying dolostones and argillites.

2) Multiple Intrusive Activity

All areas examined which host mineralization have some component of intrusive rocks. Two intrusive rock types are prominent on the Jacleg claim group; both are green in color and mafic in character. The major type is the diorite - gabbro sills which are a common feature within the Fort Steele formation in this area. The largest sills encountered are on traverses # 4, 5 & 7. These sills are in excess of 75 meters wide. Smaller gabbros were noted on traverses 1, 2, 3, 6 & 10. It is not uncommon to find quartz veins cutting the sills; some veins have limonite with weak patches of copper mineralization while most veins host only chlorite, manganese and epidote. The other common intrusive type is a medium to fine-grained green rock which is always seen as short-lived dikes. These dikes exhibit the most alteration and show the greatest degree of tectonic stresses. The dikes show no favored orientation and often reach widths in excess of 5 meters.

3) Alteration

There are 4 major alteration types noted on the Jacleg claims; sericite-chlorite, pyrite-limonite, silicification, and carbonate alteration.

The most common alteration is the sericite-chlorite assemblage. This alteration type is regional in extent but does show noticeable increases in intensity adjacent to both intrusives and fault zones.

Another common type of alteration is pyrite-limonite as 'flooded zones' hosted by medium to coarse-grained Fort Steele formation quartzites. This sulfide flooding doesn't seem to have the same affinity for structure or intrusives as does the sericite-chlorite assemblage.

Silicification is another common alteration type with the most obvious silicification occurring in the form of veins. The veins are most commonly associated with structural zones where they may or may not contain sulfides. Large veins might reach widths in excess of 50 cm while individual zones of quartz veins can exceed 10 meters in width.

The final alteration type is carbonatization, which can be found in all rock types on the Jacleg property. Carbonate alteration occurs as veins of calcite, ankerite, siderite, dolomite (all commonly with quartz) and locally extensive carbonate freckling. Carbonate freckling occurs in all formations and is represented by small densely packed round rusty brown concretionary features. The most intriguing carbonate alteration occurs in some of the narrow sheared mafic dikes reported on in section 2) on intrusives. The carbonate alteration can be very intensive, altering the green dikes to a light cream yellow color on fresh surfaces but weathering brown. With this extreme alteration there is also present narrow quartz veining, disseminated sulfides and flecks of nickel-chrome micas (mariposite?). It is in association with this type of alteration that the best gold mineralization has been seen on the property.

4) Complex Structure

The major fault zone on the property is the Lewis Creek Fault, which is interpreted to be a growth fault. Evidence for this argument can be seen in the large number of diorite - gabbro sills and dikes which exist on the southern contact of the fault. The proximity of these intrusives to the Lewis Creek fault suggests a genetic relationship. The Lewis Creek fault is a northwest trending zone (~060° azimuth). This structural corridor is intersected by a number of northwest (300° - 350° azimuth) shears and faults. The northwest structures are delineated by intense shearing, carbonate alteration, sericite-chlorite alteration and development of quartz veins, with some zones hosting green dikes. These structures have weak sulfide mineralization, both in veins and wallrock. Copper mineralization where it exists seems to be developed most strongly when associated with obvious northwest jointing within coarse quartzite units. The most interesting and potentially important structural zones noted on the property are wide, bedding-parallel breccia zones which exist at contacts between coarse quartzite units and upper cycle siltstone - argillites. The most pervasive zones are seen near the contact of the upper Fort Steele Formation quartzites and the base of the Hughes Range lower Aldridge Formation (gray-black argillite and chert layered dolostone). These breccia zones may be caused by flat faults ('glide zones') which have taken up repeated tectonic movement. Quartz veining and sulfide-oxide alteration are common in these zones; some also host intrusive activity.

5) Stratigraphy

The Jacleg property stratigraphy is a very attractive package of rocks. The lowermost coarse-grained gray quartzites with or without the widespread breccia zones were originally a zone of high porosity which would allow good fluid movement. The overlying gray-black graphitic argillites provide an excellent reducing environment or cap rock. The upper unit of this interval is a well bedded mixed package of limestones and dolostones which also provides a good host for mineralization. The combined sectional width of this active stratigraphic package is in excess of 100 meters.

Conclusions

Prospecting on the Jacleg property has identified good potential for economic gold mineralization. Favorable structure and stratigraphy are supported by strong precious and base metal values as indicated in the rock geochemistry; these provide a strong incentive for continued work on the property. Follow-up work should be undertaken in all areas where prospecting has identified gold values in rock of more than 100 ppb. Priority should be given to zones exhibiting the highest degree of structural complexity and alteration.

3.00 GEOLOGY

3.10 Regional Geology

The JacLeg property occurs on the east side of the Rocky Mountain Trench, within the Fernie (West Half) map sheet (Leech, 1960) and is also included in BCMEMPR Preliminary Map 36 by Trygve Hoy: Geology of the Estella - Kootenay King Area, Hughes Range, Southeastern British Columbia (1979). A portion of this map which covers the area of the JacLeg claims is reproduced here as Figure 4.

3.20 Property Geology

Lithology

The property is underlain by the Fort Steele Formation which is the oldest unit of the Purcell Supergroup exposed in Canada, as well as overlying Aldridge Formation. According to Hoy (1979):

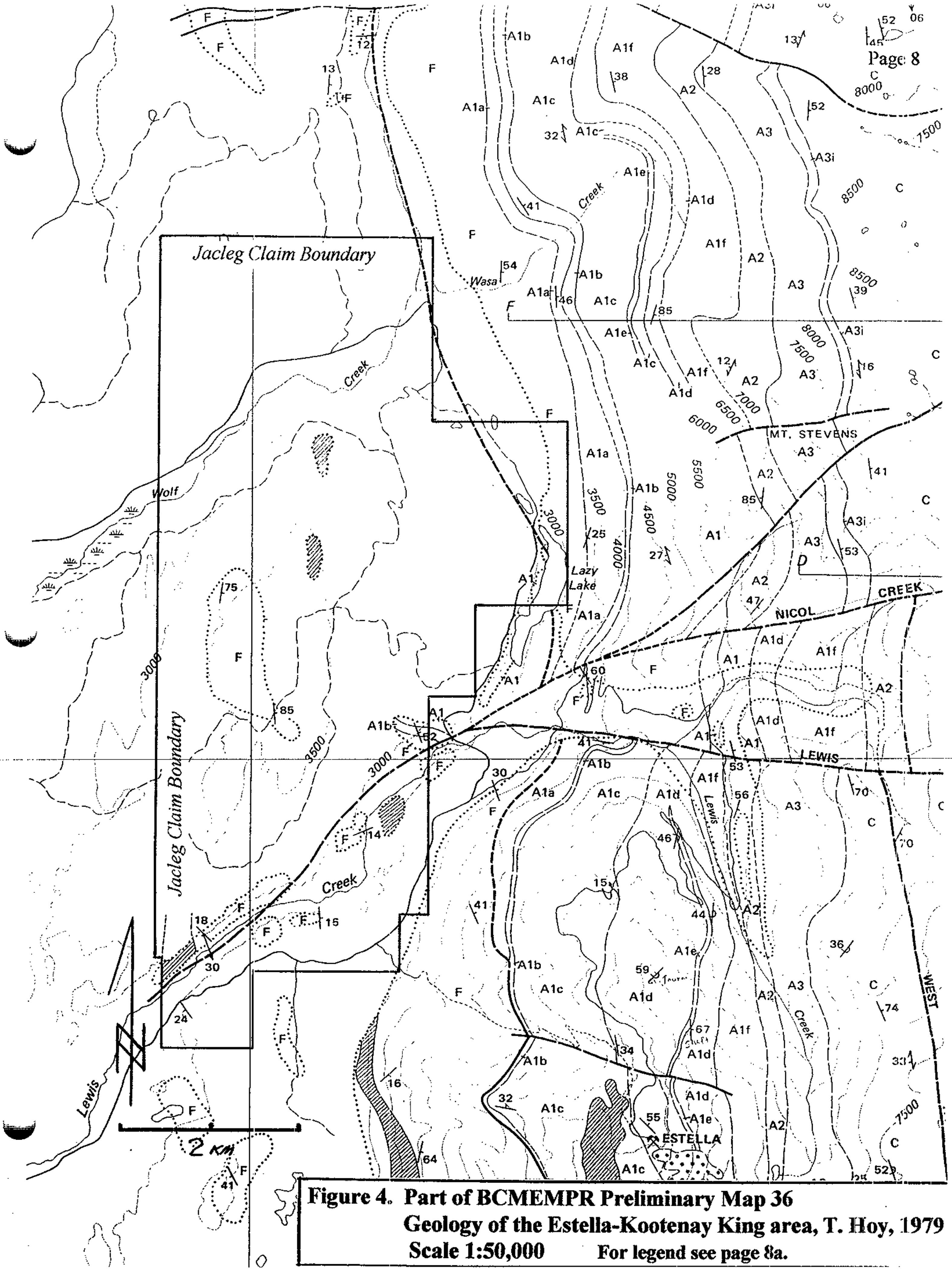

Figure 4. Part of BCMEMPR Preliminary Map 36
Geology of the Estella-Kootenay King area, T. Hoy, 1979
Scale 1:50,000 **For legend see page 8a.**

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

PRELIMINARY MAP 36

GEOLOGY OF THE ESTELLA–KOOTENAY KING AREA
HUGHES RANGE
SOUTHEASTERN BRITISH COLUMBIA

(NTS 82G/11, 12, 13, 14)

GEOLOGY BY TRYGVE HÖY, 1976–1978

LEGEND

CRETACEOUS

QUARTZ MONZONITE, SYENITE

HADRYNIAN/HELIKIAN

PURCELL SUPERGROUP

PURCELL SILLS AND DYKES

C — CRESTON FORMATION: GREEN AND PURPLE ARGILLITE AND SILTSTONE, WHITE AND GREEN QUARTZITE; MINOR DARK ARGILLITE

ALDRIDGE FORMATION

A3 — DARK GREY FINELY LAMINATED ARGILLITE; MINOR SILTSTONE

A3i — DARK GREY ARGILLITE WITH LENTICULAR BEDDING

A2 — QUARTZITE, SILTSTONE; INTERLAYERED WITH DARK ARGILLITE

A1 — FINELY LAMINATED ARGILLITE, SILTSTONE; MINOR DOLOMITE, QUARTZITE

- f MEDIUM TO DARK GREY SILTSTONE, ARGILLITE
- e THICK–BEDDED QUARTZITE; MINOR CONGLOMERATE
- d BUFF–COLOURED DOLOMITIC SILTSTONE, DOLOMITIC ARGILLITE; ABUNDANT LENTICULAR BEDDING AND RIPPLE CROSSBEDDING
- c GREY SILTSTONE, ARGILLITE; TAN SILTSTONE, BLACK GRAPHITIC ARGILLITE
- b SILTY DOLOMITE, DOLOMITIC SILTSTONE; MINOR LIMESTONE
- a GREY TO BLACK SILTSTONE AND ARGILLITE

F — FORT STEELE FORMATION: WHITE CROSSBEDDED QUARTZITE, MUD–CRACKED SILTSTONE, ARGILLITE

SYMBOLS

GEOLOGICAL CONTACT:
DEFINED, APPROXIMATE, ASSUMED

FAULT: DEFINED, APPROXIMATE, ASSUMED

ANTICLINE – AXIAL SURFACE

BEDDING (S_0): VERTICAL, INCLINED, OVERTURNED

FOLIATION, CLEAVAGE (S_1)

LINEATION ($S_0 - S_1$ INTERSECTION)

FOLD AXIS

MINERAL DEPOSIT

LIMITS OF OUTCROP (OR MAPPING)

Legend for Figure 4

The total thickness of the exposed (*Fort Steele Formation*) section is in excess of 2000m; the base is not exposed. The formation comprises at least three upward-fining sequences, several hundred metres thick, that grade from coarse, massive to crossbedded quartzites at the base to thinly laminated siltstones at the top. Within each of these megacycles are numerous smaller scale upward-fining sequences, and some coarsening upward sequences.

Orthoquartzites at the base of the megacycles are generally medium to coarse grained. They commonly form discontinuous beds up to a meter thick which may thin and die out laterally. They are commonly structureless or only crudely layered and they scour the underlying unit producing broad troughs. Trough, tangential, and planar/tabular crossbedded quartzite layers are common near the base of the megacycles. These layers are generally more laterally persistent than the massive quartzite beds and their thickness is less variable.

Up-section within each of the megacycles, quartzites are finer grained, less pure, thinner bedded, and more persistent laterally. The relative proportion of the siltstone/argillite component at the top of smaller, upward-fining sequences increases. Beds consisting dominantly of planar/tabular crossbedded quartzite are also common within the central portion of the megacycles, and thick tangentially crossbedded planar beds with high angled (to 35 degrees) foreset laminae occur occasionally.

The top of the megacycles consists of interlayered siltstone and argillite. The siltstone layers are thin (generally less than 5 centimetres thick) and horizontally laminated or ripple cross-laminated. Individual beds grade up to dark, laminated argillite that contains abundant dessication cracks. Lenticular bedding and silt scours are common. Near the top of the Fort Steele Formation the quartzite/siltstone component gradually decreases and medium to dark grey, finely laminated siltstone and argillite begin to predominate. Within this transition zone bedding is commonly defined by siltstone/argillite couplets up to several centimetres thick. Quartzites are uncommon, and dessication cracks are extremely rare. The Fort Steele/Aldridge boundary is gradational. On the map it is placed above the last occurrences of crossbedded quartzite or observed dessication cracks in argillite.

The Fort Steele Formation is overlain by the Aldridge Formation which regionally is a dominantly fine grained, thick succession of wackes and siltstones of turbidite affinity, but in the Rocky Mountains near the JacLeg property the lower portion of the Aldridge Formation includes more argillaceous units and distinctive carbonate units. Hoy (1979) further says:

Rusty weathering argillite, siltstone, and shale of the Aldridge Formation conformably overlie the Fort Steele Formation. The Aldridge Formation has been divided into three main divisions. The lowest division, A1, comprises dominantly fine-grained clastic rocks and a prominent carbonate horizon. Previous mapping (Leech, 1960) has placed the units

> underlying and including the carbonate horizon within the Fort Steele Formation, but it has been proposed (Hoy, 1978) that these units be assigned to the Aldridge formation which they more closely resemble. The middle division of the Aldridge, A2, includes interlayered argillite and wacke, and the upper division, A3, is dominantly dark, finely laminated argillite.

Hoy further describes the lowermost A1 unit of the Aldridge Formation:

> The basal unit of A1 (A1a) consists of medium to dark grey to black, finely laminated argillite and siltstone. Flaser and lenticular bedding occur occasionally and siltstone/argillite couplets up to 3 centimetres thick may define bedding. A1b is a prominent carbonate unit that serves as a marker horizon within the lower division of the Aldridge Formation. It varies in thickness from less than 20 meters to greater than 100 meters. It is commonly a buff to grey-weathering silty dolomite unit that is interlayered on a 0.5 to 1.0-centimetre scale with fine-grained dolomitic siltstone, light green very siliceous dolomite, or chert. It may also consist of finely laminated, slightly crenulated dolomite or laminated dolomite pods in a more massive, silty dolomite. Finely laminated, grey-weathering limestone occurs at the top of the unit on the thick section north of Wasa Creek.
>
> South of the Lewis Creek fault, the succession immediately overlying the carbonate unit can be divided into three units (collectively termed A1c on the map). These include a massive to only faintly laminated black, graphitic argillite, overlain by a lighter coloured grey, greenish grey, or tan-coloured, finely laminated siltstone or silty argillite, and, finally, a medium to dark grey, rusty weathering massive to faintly laminated argillite. Carbonate pods and rare, thin, silty quartzite layers occur occasionally within the top two units of A1c. North of the Lewis Creek fault, the subdivision of A1c is not as apparent. It consists of massive to finely laminated, medium grey siltstone and rusty weathering, dark argillite.

The other A1 units are not known to occur in the immediate area of the JacLeg claims.

Hoy's mapping (1979) further defines a NNW-trending fault crossing through Lazy Lake with A1 stratigraphy exposed to the west, indicating a downthrown western block. Thus the 'transition stratigraphy' from Fort Steele Formation to lowermost Aldridge Formation is exposed on the JacLeg claims

Both the Fort Steele and Aldridge Formations are intruded by gabbroic sills and dikes of the Moyie Intrusions. They consist mainly of medium grained amphibole and plagioclase.

Hoy interprets the depositional environment of these rocks as:

The Fort Steele Formation at the base of the exposed Purcell sequence consists predominantly of braided fluvial deposits derived from a source area to the south. A marine transgression is apparent in Early Aldridge time, and the alluvial fan deposits of the Fort Steele are overlapped by intertidal and subtidal mud flat deposits, which give way upward to slightly crenulated and laminated carbonates (A1b) that are similar to subtidal algal mat deposits. Overlying laminated siltstone and argillite of unit A1c represent continuing transgression.

The 'Transition Zone" rocks near the Fort Steele - Aldridge contact are favourable host lithologies for gold deposition. The range of lithologies presents opportunities for accumulation of epithermal or mesothermal gold due to chemical or physical differences in the rocks.

Structure

The area of the JacLeg claims is structurally complex and thus provides numerous opportunities for structurally-controlled epigenetic gold mineralization.

The structure of the Estella - Kootenay King area is dominated by a large, open, recumbent anticline (Hoy, 1979). Its axial plane dips to the west and bedding in its upper limb, in the western part of the area (i.e. including the JacLeg claim group), dips to the west.

Faults near the area of the JacLeg claims indicated by Hoy (1979) show some complexity. An ENE-trending fault follows Lewis Creek; where this fault crosses Mt Stevens it has only minor displacement. Two other faults splay off from this fault just south of Lazy Lake; the northern one is the Nicol Creek fault, the southern one the Lewis Creek fault. Displacement indicated on these structures is greater than on the northernmost ENE fault. A north-striking fault between the Lewis Creek and Nicol Creek faults is a thrust, with Middle Aldridge on the west upthrown onto Creston Formation to the east. South of the Lewis Creek Fault, the north-striking East Tackle Creek Fault is a normal fault with west side down. Similarly the NNW striking fault which crosses through Lazy Lake is a west side down normal fault.

Wolf Creek at the north edge of the JacLeg claims is an ENE oriented drainage, parallel to Lewis Creek. Detailed mapping adjacent to Wolf Creek in the vicinity of the Dar-Wolf workings indicates a fault is present in this drainage as well. This fault may extend to the ENE up Wasa Creek.

Subordinate structural breaks on the property are northwest and NNW in orientation. A zone of strong silicification on the Goldylot claims just south of LewisCreek is oriented northwest. Pyritic quartz breccias north of Lewis Creek, just east of the Copper Cliffs and north of Wasa Creek are northwest-trending. In some cases these breccias are cut off to the south by ENE breaks (subordinate structures parallel to Lewis and Wolf Creeks).

Furthermore, the very large (west-dipping?) normal Rocky Mountain Trench Fault occurs along the east edge of the Rocky Mountain Trench, probably just a short distance west of the western-most bedrock exposures on the JacLeg claims. This fault is entirely covered by thick overburden in the Rocky Mountain Trench but its presence can be determined from regional geology. Recent deep diamond drilling a short distance southeast of the Jacleg property encountered further structural complications but did serve to indicate a west side down displacement of about 1000 m on the Rocky Mountain Trench Fault (Klewchuk, 1999, AR 25,938). Faulting encountered in this drill hole is largely not yet annealed, suggesting quite recent movement, possibly younger than Cretaceous. The Rocky Mountain Trench Fault may have been active during the Cretaceous, when much of the gold mineralization in the East Kootenays is believed to have been deposited. The northeast oriented Lewis Creek Fault and a probable, inferred parallel trending structure in Wolf Creek evidently diminish in intensity toward the east, strongly suggesting an orthogonal, genetic relationship to the Rocky Mountain Trench Fault.

Intrusives

Gabbro

Gabbroic and dioritic composition sills and dikes of the Moyie Intrusions are present within the Fort Steele and Aldridge formations. They are present in the Fort Steele formation on the JacLeg claims and provide a contrasting lithology, both chemically and physically, to the Fort Steele quartzites and siltstones.

Fine-grained green mafic dikes are present on parts of the property. Some were mapped in detail on the Goldylot claims (Klewchuk, 1998); they cross-cut gabbros and are evidently young, possibly as young as Cretaceous.

Green intrusive dikes and sills are present in the central part of the property north of Lewis Creek. These are strongly chloritic and appear mafic in composition. Strong carbonate alteration has affected significant portions of many of these dikes and sills, resulting in a lighter, cream yellow coloration, usually with fairly bright green, Cr-Ni -bearing micas. Weathering results in a strong brown color and the dikes are referred to as 'green-brown dikes'. To date, the best gold mineralization seen on the property is within quartz-dolomite veins developed proximal to these carbonate-altered intrusives.

Mineralization

A number of old workings that occur on the claim group were excavated by old-time prospectors for copper, and possibly as well for gold.

Recent prospecting by C. Kennedy has identified multi-gram gold values over a broad strike length along the west flank of the Rocky Mountains. The Jacleg property can thus be considered near the northeast edge of a broad northeast-trending gold zone that crosses the Rocky Mountain Trench and includes the placer drainages of Perry Creek and Moyie River to the southwest and the Wild Horse river in the Rocky Mountains to the northeast. This gold zone is characterized by Cretaceous age felsic (quartz monzonite, granodiorite) intrusives. Gold appears to be associated with relatively late stage intrusion of more syenitic dikes, and is present in shear zones and discrete quartz veins.

Gold was first recognized in a large stratabound 'quartz vein' north of Wasa Creek, within the lowermost Aldridge stratigraphy, just above the Fort Steele contact. This quartz vein gets up to 20 meters thick and is laterally very extensive. Although not on the JacLeg claims, the quartz vein represents a favourable gold target, and, with the same stratigraphy present on the JacLeg claims, opportunity exists to have gold present in a similar setting.

A proposed model of mineralization for the property is one of structurally-controlled epithermal polymetallic mineralization related to young intrusives. Gold is considered the main element of interest but initial sampling has identified significant values in silver, copper and lead, as well as anomalous concentrations of nickel, cobalt, bismuth, molybdenum, gallium and zinc.

Work done to date suggests gold is localized within the Fort Steele formation in association with quartz veining, brecciation and carbonate alteration. Different levels of stratigraphy appear to be favourable.

A lower (Goldylot) horizon within the Fort Steele Formation may be favourable because of the presence of a series of gabbro sills (and dikes?) as well as proximity to the Lewis Creek Fault.

The Fort Steele - Aldridge contact / transition zone is a higher recognized favourable stratigraphy. Immediately above the Fort Steele quartzites is a sequence of mixed lithologies ranging from dark gray argillite to medium thick quartzite. This 'Banded Unit' appears to have reacted in a relatively fissile manner to structural deformation, allowing significant dilatency to develop, within which quartz-carbonate veins and pyrite-gold mineralization have concentrated. Overlying lower Middle Aldridge stratigraphy includes 'Black Mud Zones' of black to dark gray argillite, locally pyritic and geochemically anomalous in base metals. The dolomitic A1b unit which occurs within argillite-siltstone stratigraphy further adds a chemically and physically different unit and caps the inferred most favourable stratigraphy on the property.

Gold mineralization is known to be spatially associated with Cr-Ni enriched dolomitic-altered intrusives. Gold occurs within:

1. Quartz-carbonate vein / breccia development in the 'Banded Units'
2. Quartz vein breccias in the Fort Steele Formation quartzites

Quartz vein breccias appear to be developed adjacent to ENE (060°) structures; the Lewis Creek / Wolf Creek orientation (Klewchuk, 2001). These breccias are both parallel / sub-parallel to NE structures and orthogonal (~160° azimuth) to them.

Another possibly economic target is breccia zones comprised of thin mm scale tension gash quartz-dolomite veins with pyrite, chalcopyrite, galena &/or sphalerite. This style of gold mineralization is locally present within the district. Fracture veinlets of this apparent style, carrying dolomite and quartz, have been seen adjacent to Wolf Creek within one of the 'Banded Units'. These veinlets are oriented ~350°, parallel to a fault zone that occurs just a few m to the east. A selective sample was collected (DW-00-1; Appendix 1) but contains no significant gold.

The JacLeg claims are centered about 10 km northwest of the Estella Zn-Pb-Ag vein deposit and 15 km northwest of the stratiform Zn-Pb-Ag Kootenay King deposit. Both are hosted by middle Aldridge Formation. The Aldridge Formation is host to one of the world's largest zinc-lead-silver deposits at Kimberley, B.C. Although within relatively coarse-grained clastic sediments (of turbidite affinity), the Sullivan is classed as a shale-hosted SEDEX zinc-lead-silver deposit. The classic host for such deposits is black shales. The A1a unit of the lower Aldridge Formation in the Rocky Mountains, part of which occurs on the JacLeg property, is typically pyritic and is anomalous in lead, zinc and copper. This unit is thus considered a very favourable potential host for a classic SEDEX deposit and opportunity exists on the JacLeg claims to discover such a deposit.

In 2000, detailed geologic mapping and rock geochemistry were conducted on two separate areas of the Jacleg claims, adjacent to Wolf Creek and near old workings and a new discovery of gold mineralization in the central part of the claim block.

3.21 Wolf Creek Area

Six days were spent doing detailed geologic mapping in the Wolf Creek area around a small cluster of old workings. The area had been earlier prospected by C. Kennedy who discovered the old workings and recognized the favorable stratigraphy and alteration. The area of detailed mapping is indicated on Figure 3 and the detailed geologic map is provided as Figure 5.

Stratigraphy

The Wolf Creek area within the Jacleg property is underlain by the upper part of the Fort Steele Formation and the lower part of the Middle Aldridge Formation. This 'transition stratigraphy' is lithologically diverse and represents good host rocks for gold mineralization.

The upper part of the Fort Steele Formation includes quartzites, siltstones and argillites, some of which are pyritic and may carry base metals.

The lower units of the Middle Aldridge Formation consist of gray to black argillites and siltstones with an included gray-brown dolomite-chert-siltstone unit (A1b unit of Hoy, 1979). The dolomite is typically buff to brown to reddish-brown weathering and is mixed with thin and medium bedded argillites, silts and siliceous bands which were probably originally chert units. The host dark gray to black argillite-siltstone unit commonly contains discontinuous bedding-parallel quartz veins, many of which are rusty-weathering from included pyrite, iron-bearing dolomite or both .

Structure

Wolf Creek is a linear drainage, trending at ~060° and parallel to Lewis Creek to the south, and it may harbor a fault similar to the Lewis Creek Fault to the south, although regional geology to the east does not support such a structure.

Bedding in the area trends northwest with moderate northeast dips. Minor folding is present at an outcrop scale, seen particularly well within the dolomite unit. Some of the minor folding in the dolomite is controlled by 135°/50°NE cleavage. Quartz-filled radial axial plane cleavage is present with some of the minor folds in the dolomite unit.

A black mud zone is exposed by one of the adits on the property, with a 144°/34°W fabric, dipping against the local bedding and supporting the probability of the black mud zone being part of a fault zone.

Intrusives

A non-magnetic, chloritic 'green dike' cross-cuts bedding of the Fort Steele quartzites and is terminated on its western edge by a NNW oriented fault. The dike appears to be of relatively felsic composition, with no obvious mafics except for a brown-weathering mineral (~25% by volume) which could be an altered mafic mineral. The dike appears quite siliceous or felsic and contains amygdule-like quartz blebs, with pyrite. The groundmass is fine-grained and is probably mainly fine quartz, feldspar, sericite and chlorite. The dike lacks pervasive cleavage, suggisting a relatively young age; it may be related to Cretaceous felsic stocks which occur in the district and at least some of which are related to gold mineralization.

Alteration

Prominent alteration in the Wolf Creek area is mainly quartz-dolomite, chlorite and pyrite. Quartz and quartz-dolomite veining is widespread but irregular in development. Veins range in thickness from <1mm to rarely >1m. They occur isolated, as swarms, as a breccia matrix. Thin hairline quartz-dolomite veinlets occur within mixed lithology units locally on the property, in association with bedding sub-parallel white quartz veins, some of which carry minor galena. Although a sample of these veinlets (DW-00-1) contained no gold, significant gold has been seen within the district in similar-looking thin lensey quartz-dolomite veinlets, particularly in association with galena and chalcopyrite.

Mineralization

Three minor, old workings are present in the Wolf Creek area of detailed mapping. Copper mineralization appears to have been the attraction as copper staining is present.

One adit is developed on a narrow (~10 cm wide) bedding-parallel (?) quartz vein in sheared siltstones with dark blue-gray quartz lenses.

A second adit is in recessively weathered black muds which are strongly sheared within a probable fault zone; the shear fabric dips opposite the local bedding.

The lowermost adit is developed on a 1.5 m wide fault zone with shearing at 157°/37°W. This structure could underlie all of the bedrock exposed on the south side of Wolf Creek here. Within the fault zone are wavy, lensey quartz veins trending 057°/~90° ie roughly perpendicular to the fault trend.. The adit was driven in the fault zone but on strike with the 057° quartz veins. Fort Steele Formation quartzites occur in the upper part of the fault zone; they are bedded at 022°/25°E, and are extensively brecciated in a 2-3 m wide zone with numerous lensey quartz veins; many appear sub-parallel to the main fault zone while many are cross-cutting. Thin quartz veins are pitted with rusty spots which are probably oxidized pyrite. Small splashes of malachite occur in the hangingwall quartz vein breccia.

On the north side of Wolf Creek, extensive NNW trending quartz vein breccia zones are developed in Fort Steele Formation quartzites. These breccias trend NNW and contain pyrite which is largely oxidized on surface to produce limonitic quartz veins. These quartz vein breccias have not been well sampled to date but they represent a favorable target for gold mineralization.

3.22 Jacleg Showing Area

Detailed mapping was conducted over a small portion of the central Jacleg claim group in the vicinity of the old 'Copper King' workings and a newly discovered occurrence of gold mineralization (Figures 3 & 6).

Stratigraphy

This area of the Jacleg claims is underlain by relatively flat-lying stratigraphy of the Fort Steele Formation comprised mainly of massive white, gray and yellowish quartzites with intervening narrower zones of mixed lithologies ranging from argillite to thin and medium bedded quartzites. The more massive quartzites commonly have very poorly defined bedding; where bedding is more obvious in the thinner bedded units, folding can sometimes be distinguished and the areas of massive quartzites may be folded as well.

Of particular interest on this part of the property is a 'Banded Unit' lithology which consists of a mixture of thin bedded and laminated phyllitic argillite, mixed with more competent units of commonly lensey, thin and medium bedded siltstone and quartzite. This mixed lithology unit has reacted to tectonism in a relatively fissile manner locally, with resultant brecciation and development of quartz and quartz-dolomite veins. Much of the known gold mineralization in this part of the claim group is developed within this lithologic unit and it appears to be the most favourable host.

Structure

Bedding in the area of the Jacleg claims appears to be relatively flat-lying with gentle to moderate dips. Bedding is usually poorly defined in the more massive Fort Steele Formation quartzites but is better defined in the thin bedded units. Beds strike north-northwesterly with predominantly gentle east dips. West dips are locally present and indicate the presence of gentle anticlinal / synclinal folding. Detailed mapping clearly demonstrates a ductile style of deformation during tectonism, as locally more argillaceous units are quite strongly thickened and thinned, even attenuated.

Precambrian gabbros were mapped at the west and northeast extremities of the map area. These appear to be sills and may be one body, which then would underlie virtually all of the map area.

Younger green-brown intrusives occur as bedding sub-parallel sills and cross-cut stratigraphy as predominantly northeast-trending dikes, with rare northwest orientation.

At the western edge of the map area a prominant, wide quartz-dolomite vein / breccia zone strikes NNW with a steep eastern dip. This structure is similar in orientation to breccia zones developed north of Wolf Creek, and both are parallel to the Rocky Mountain Trench Fault. North-northwest structure is evident across much of the map area with numerous quartz veins, shearing and fractures of this attitude.

Intrusives

The gabbros seen at the west and northeast edges of the map area are typical of Precambrian gabbros which intrude the Fort Steele and Aldridge Formations in the district. They are comprised mainly of amphibole and plagioclase with minor quartz, and usually some pyrite.

Younger green-brown dikes are common in the map area. These are a medium dark green color but are locally carbonate altered and then weather a distinctive brown. The dolomite alteration is incomplete and commonly results in only partial brown discoloration. In places only narrow hangingwall and footwall portions of the dikes are altered, with a central green portion.

The green-brown dikes are somewhat irregular in character but do tend to follow regional structural trends. Bedding sub-parallel 'sills' and northeast dikes are most common with one northwest dike noted. The northeast dikes dip 38° to 85° north and are parallel in orientation to gold-bearing quartz vein and quartz breccia zones previously mapped immediately south of the Lewis Creek Fault on the Goldylot claims at the south edge of the Jacleg property (Klewchuk, 2001). Generally these intrusives show some variation in thickness and appear to be discontinuous, although bedrock exposure is generally not complete enough to provide good definition.

Quartz and quartz dolomite veins are commonly developed on the margins of green-brown dikes and locally these veins carry gold and copper mineralization. In addition, wallrock adjacent to some green-brown dikes is locally altered by pinkish hematite or dolomite freckling.

The green-brown dikes carry a distinctive apple green mineral which is enriched in chromium and nickel suggesting a possible deep-seated mafic or ultramafic affinity.

Alteration

Alteration in the central part of the Jacleg property includes chloritic, hematitic, silicic, dolomitic and pyritic alteration

Chloritic alteration is evident within the map area in Fort Steele Formation quartzites and siltstones as a pervasive pale greenish coloration. Stronger chloritic alteration is present at one quartzite-siltstone contact, not far east of a thick green-brown dike. Chlorite alteration is commonly associated with local development of pyrite.

Hematitic alteration was noted at a number of localities, commonly in association with quartz veining, quartz vein breccias and pyrite. Quartzites intruded by green-brown dikes are very locally pinkish, hematitic altered. At one locality (sample JL-00-7) a green-brown dike with quartz veining also contained specular hematite. Geochemical analysis of this specimen returned a gold value of 613 ppb, suggesting a possible relationship between hematite alteration and gold mineralization.

Silicic alteration is widespread across the map area and includes quartz veins of various sizes up to more than one meter thickness. A number of weak, moderate and strong quartz vein (+/- dolomite) breccias, almost always with a NNW orientation, are scattered across the map area. Stronger chloritic, hematitic and pyritic alteration commonly occurs with or near these quartz vein breccia zones. In addition, seemingly isolated quartz veins, hosted by Fort Steele Formation quartzites, are pyritic and dolomitic, supporting a widespread, more pervasive alteration process which is not just restricted to structures.

Dolomitic alteration occurs in two ways; as dolomite crystals mixed with quartz in veins and as disseminated 'freckling' in wallrock. The freckling is distinctive because the dolomite spots weather somewhat limonitic. Quartz-dolomite veins are present where some of the better gold mineralization exists; visible gold was recognized in one quartz-dolomite vein and the Copper King workings, where anomalous gold and copper are present, are developed in part on quartz-dolomite veins. Dolomite freckling is developed locally in wallrock on the margins of some green-brown dikes, indicating a genetic relationship either with the intrusion of the dikes or with the dolomitic alteration of these dikes.

Pyrite is not uncommon in the map area, generally occurring with other alteration types, commonly in quartz veins but also disseminated in the sedimentary rocks. Pyrite tends to be clustered in areas with more extensive quartz veining and quartz vein breccias.

Mineralization

Results of the rock geochemistry demonstrate the presence of anomalous gold, silver, copper, lead, arsenic, molybdenum, chromium and nickel on the property. Gold and copper are the two elements with the most economic potential.

At the JacLeg showing, visible gold is present in quartz veining with pyrite and dolomite in brecciated Banded Unit rocks. A Cr-Ni dike (N-S?) cuts between two areas of quartz veining. No obvious copper staining is present here and the quartz has not been worked on, even though the two zones of quartz breccia are well exposed on opposite sides of a rounded knob, openly wooded and with considerable surrounding bedrock. It is improbable that this zone was not seen by prospectors. Presumably the lack of obvious copper mineralization deterred them and resulted in the gold mineralization going undetected.

The Copper King workings are developed in large quartz veins hosted by a 'Banded Unit' of mixed lithologies ranging from phyllitic argillites to thin and medium bedded siltstones and quartzites. The workings include a shallow shaft and 2 sloughed trenches. Dump material consists mainly of coarse quartz-dolomite with pyrite and minor chalcopyrite; sampling has returned values of 6.785 and 4.455 g Au/tonne with elevated Cu, Mo & Ag.

Anomalous gold is locally associated with green-brown dike material that includes specular hematite.

Pyrite is present at numerous localities and is present within quartz veins and disseminated within wallrock. Pyrite is concentrated near or within NNW trending quartz breccia zones; minor chalcopyrite is locally associated with the pyrite.

4.00 ROCK GEOCHEMISTRY

Prospecting activity on the Jacleg property resulted in 106 rock samples being collected; an additional 25 samples were collected during the course of geological mapping, for a total of 131 rock samples. Location of the samples is shown in Figures 3, 5 and 6 with brief descriptions of the rock samples in Appendix 1. Rock samples were shipped to Acme Analytical Laboratories Ltd. at 852 East Hastings Street, Vancouver, B.C., and analyzed for a 30 element ICP package and geochemical gold by standard analytical techniques. Complete geochemical analyses are provided in Appendix 2.

Results

The potentially most significant discovery was the association of gold mineralization to structural zones hosting green-brown dikes. These dike zones show strong carbonate alteration in areas where quartz veins contain anomalous values in gold. The geochemical signature of these altered zones suggests a mafic affinity for the dikes with elevated values in nickel and chrome present in numerous samples. Both northwest and northeast structural systems host dikes and carbonate alteration. It thus appears that silicified zones associated with altered dikes provide one of the best opportunities to find gold mineralization.

The following groups of samples indicate the mafic geochemical signature:

Samples JJL-01, JJL-03; altered northwest trending dikes with sampling preference placed on narrow quartz veins containing limonite and rare chalcopyrite. Ni values are 273 and 129 ppm, Cr values are 590 and 255 , and gold values are 196 and 104 ppb, respectively (Appendix 2).

Samples Jjl-06 to JJL-09; northwest structure with altered dikes; all samples white quartz veins, sulfide-poor, taken from structural zone. Ni and Cr values are moderately low but gold values are 71, 333, 533 and 1057 ppb.

Samples JJL-22 to JJL-27; breccia zone associated with strong northwest fault. JJL-22 (584 ppb Au) is a quartz vein in an altered dike while JJL-27 is a carbonate altered dike (677 ppm Ni, 288 ppm Cr).

Sample JJL-98 to JJL-106; strong northeast structure has a number of altered dikes within the system. Samples are mostly of quartz veins with limonite and pyrite. Ni and Cr values are low but gold values include 452, 972 and 4289 ppb values.

5.00 CONCLUSIONS

Gold on the Jacleg property is spatially associated with young green-brown dikes and appears best developed in thin bedded mixed lithology units which range from phyllitic argillite to quartzite. These mixed lithology units appear to have reacted to tectonic deformation in a fissile manner, developing local low pressure zones which were favorable for deposition of silica, dolomite and gold.

In the Wolf Creek area, copper mineralization is associated with quartz veins and fault breccias that are developed within the Fort Steele - Aldridge transition stratigraphy. Sizeable pyritic quartz vein breccias developed in the brittle Fort Steele Formation quartzites north of Wolf Creek represent a favorable target for gold mineralization.

6.00 REFERENCES

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7.00 STATEMENT OF COSTS

10 days prospecting @ $330/day (includes [illegible]	$3300.00
16 days field mapping @ $300/day	4800.00
16 days vehicle @ $75/day	1200.00
Report and drafting 3 days @ $300.00/day	900.00
Rock geochem analyses 131 samples @ $16.00/sample	2096.00
TOTAL COST	**$12,296.00**

8.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 24 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this 27th day of September, 2001.

Peter Klewchuk
P. Geo.

PROFESSIONAL
PROVINCE OF
P. KLEWCHUK
BRITISH COLUMBIA
GEOSCIENTIST

As author of this report I, Craig Kennedy, certify that:

1. I am an independent prospector residing at 2290 DeWolfe Avenue, Kimberley, B.C.

2. I have been actively prospecting, primarily in the East Kootenay District of B.C. for the past 26 years, and have made my living by prospecting for the past 10 years.

3. I have been employed as a professional prospector by major and junior mineral exploration companies, in B.C., Nevada and the NWT.

4. I own and maintain numerous mineral claims in B.C. and have optioned a number of these to various mineral exploration companies.

Dated at Kimberley, British Columbia, this 27th day of September, 2001.

Craig Kennedy

Craig Kennedy
Prospector

Appendix 1. Description of Rock Samples

JJL-1 Altered dike, narrow quartz veins, some carbonate, chalcopyrite, limonite, Ni-Cr.
JJL-2 Cr-Ni altered dike, narrow quartz vein, rare PbS.
JJL-3 White quartz vein in carbonate-altered dike, rare limonite.
JJL-4 Narrow quartz zone at contact; quartz, gabbro, seds, some limonite.
JJL-5 20 cm quartz vein some vugs, limonitic. Chalcopyrite in gabbro sill.
JJL-6 NW structure, some limonite, white quartz, carbonate (Cr-Ni).
JJL-7 "
JJL-8 "
JJL-9 "
JJL-10 Narrow NW structure, some Ni-Cr.
JJL-11 Old pit , white quartz vein, some carbonate.
JJL-12 Narrow quartz vein in silts, some vugs, limonite.
JJL-13 "
JJL-14 20 cm quartz vein in white quartzite, some limonite & carbonate.
JJL-15 Weak breccia, some veining, limonite and carbonate.
JJL-16 Weak quartzite breccia, weak limonite and carbonate.
JJL-17 "
JJL-18 Weak quartzite breccia, some veining and limonite and carbonate.
JJL-19 "
JJL-20 35 cm quartz vein, vugs, some limonite, carbonate, rare PbS.
JJL-21 Breccia subcrop, some limonite and carbonate + blebs of tetrahedrite.
JJL-22 Carbonate-rich dike, limonitic, dolomitic, narrow quartz vein.
JL-23 Quartzite breccia, pyrite + limonite + carbonate.
JJL-24 Quartzite breccia, pyrite + limonite, rare PbS, carbonate.
JJL-25 Quartzite breccia, quartz veins + limonite + carbonate (+magnetite).
JJL-26 Quartzite breccia, quartz veins + limonite + carbonate.
JJL-27 Altered carbonate dike with limonite and pyrite.
JJL-28 Silicified Upper Cycle material. Some limonite and iron in fractures.
JJL-29 20 cm quartz vein. Some iron vugs and carbonate.
JJL-30 Quartz vein in gabbro; mostly white - good pod of limonite and vugs.
JJL-31 Upper Cycle. Some malachite and azurite. Narrow quartzite bed.
JJL-32 NW structure. White quartz, weak iron, Cr, Ni.
JJL-33 "
JJL-34 Old pit. Quartz at gabbro dike contact. Some Ni-Cr.
JJL-35 Cr-Ni-carbonate dike, calcite and limonite. Contact with silts.
JJL-36 Quartz vein. Narrow zone? Limonite and carbonate, some magnetite.
JJL-37 NE trending quartz vein, weak carbonate and limonite - pink pod.
JJL-38 Narrow quartz veins, limonite and hematite color.
JJL-39 Narrow quartz vein, limonite and hematite color.
JJL-40 Quartz - carbonate vein in carbonate dike in gabbro by fault.
JJL-41 Narrow quartz vein, limonite, carbonate + PbS, chalcopyrite (silts).

JJL-42 Quartz, limonite + chalcopyrite, malachite.
JJL-43 Limonite in fracture, quartz, some chalcopyrite + malachite.
JJL-44 Old workings, quartz vein in silts, carbonate, limonite, PbS.
JJL-45 Same as 44, chalcopyrite + carbonate + quartz.
JJL-46 Same as above, PbS stringer.
JJL-47 Green sheared dike, narrow calcite veins, rare chalcopyrite.
JJL-48 Dead looking quartz breccia, some carbonate.
JJL-49 Weak breccia, some carbonate in "big structure".
JJL-50 Narrow vein in silts, sheared, carbonate.
JJL-51 Clastic breccia, iron stain with carbonate (pink pits of limonite).
JJL-52 Quartz breccia, limonite and carbonate.
JJL-53 Fragmental, iron and carbonate-rich, some limonite cubes.
JJL-54 Narrow quartz vein in siltstone-argillite breccia (fragmental).
JJL-55 Quartzite breccia, carbonate, some limonite, narrow quartz veins.
JJL-56 Narrow 1 cm wide quartz vein (intersection) limonite and vugs.
JJL-57 4" vein (zone) some pyrite and limonite.
JJL-58 2" vein, some pyrite and limonite.
JJL-59 1 meter wide structure, chlorite, carbonate.
JJL-60Altered siltstone, quartz veins, rare PbS, limonite.
JJL-61 Quartz veins, rare PbS, some limonite and hematite.
JJL-62 Quartz, weak limonite, hematite color - good looking.
JJL-63 Quartz breccia, some limonite, carbonate, Ni-Cr.
JJL-64 "
JJL-65 Quartz breccia with limonite and carbonate.
JJL-66 Quartz-carbonate breccia, some weak limonite.
JJL-67 NE structure. Narrow quartz veins with limonite.
JJL-68 30 cm quartz vein, weak limonite.
JJL-69 Discontinuous quartz vein by gabbro.
JJL-70 Upper Cycle. Weak zone of veining, narrows, some limonite and carbonate.
JJL-71 Quartz in brown dike, some specular hematite, lots of carbonate.
JJL-72 Little blow-out. Quartz in Ni-Cr. Brown intrusive.
JJL-73 N-S quartz carbonate vein, some limonite, 30 cm wide.
JJL-74 Quartz breccia, some narrow veins, weak limonite and carbonate.
JJL-75 Narrow veins, carbonate, rare PbS, chalcopyrite, limonite. Samples 75 to 78 comprise a zone in argillite.
JJL-76 Narrow hematite colored vuggy veins, some carbonate.
JJL-77 Narrow vein, vugs, rare chalcopyrite, some carbonate.
JJL-78 Narrow vein, vugs, some PbS, chalcopyrite + carbonate.
JJL-79 Narrow quartz vein cross-cutting big structural zone, some limonite.
JJL-80 Quartz-carbonate pod - some weak limonite.
JJL-81 "
JJL-82 Narrow NW structure; green quartzite, quartz veins, rare pyrite and limonite.
JJL-83 Pod of quartz in sheared gabbro, chalcopyrite and limonite.

JJL-84 Upper Cycle, quartz vein, limonite, chalcopyrite, malachite, vuggy.
JJL-85 Upper Cycle, quartz vein, carbonate, weak limonite.
JJL-86 30 cm contact, quartz vein in siltstone-quartzite, limonite and chlorite.
JJL-87 30 cm wide NW structure, carbonate and chlorite.
JJL-88 2 meter+ quartz zone, white, weak limonite, some carbonate, Ni-Cr.
JJL-89 Structural zone, quartz vein swarm, discontinuous NW, limonite + pyrite.
JJL-90 NW structure, white quartz vein, some limonite + pyrite.
JJL-91 In Upper Cycle, narrow quartz vein, some limonite and chlorite.
JJL-92 Carbonate altered brown dike. Some veining + limonite + pyrite.
JJL-93 Carbonate altered brown dike, quartz veins, some limonite.
JJL-94 Quartz vein in carbonate altered dike, limonite and hematite color.
JJL-95 Quartzite, quartz breccia, carbonate and limonite.
JJL-96 "
JJL-97 "
JJL-98 Thin bedded zone, parallel and cross-cutting quartz veins.
JJL-99 Quartzite breccia, carbonate, chalcopyrite, limonite, hematite - structure.

JJL-100	Quartzite breccia, pink dolomitic flecks, chalcopyrite - structure.
JJL-101	Quartzite breccia, carbonate and hematite, limonite, chalcopyrite.
JJL-102	Quartzite breccia, limonite vugs, hematite color.
JJL-103	"
JJL-104	"
JJL-105	Quartz vein material, vugs and limonite.
JJL-106	Ni-Cr altered dike, quartz vein, carbonate and limonite.

DW-00-1	Thin mm scale qtz-dol veins, limonitic.
JL-00-2	HW of big quartz ledge, brecciated Fort Steele quartzites (FSQ), limonitic with thin QV. Sample of dissem. chalcopyrite. Grab of different rocks with Cu, limonite. Foliated HW quartzites have phyllitic, pastel-colored, limonitic cleavage surfaces.
JL-00-3	QV and QV breccia, copper staining + black mineral (chalcocite?), dissem pyrite.
JL-00-4	Limonitic quartz breccia, minor copper stain, dissem pyrite, abundant light brown dolomite.
JL-00-5	Phyllitic seds with abundant lensey white QV. Seds and QV are limonitic. Dissem py and cpy. Suite of chips taken.
JL-00-6	Chips of limonitic, pyritic QV and limonitic seds. Similar material to JL-00-4 & 5.
JL-00-7	Brown, carbonate altered dike. Thin foliation-parallel QV, dissem py, specular hematite, limonitic veins.
JL-00-8	Contact of brown, carbonate altered dike and phyllitic seds. Oxidized py seams and quartz veins.
JL-00-9	Lensey quartz-dolomite veins with dissem py, cpy. Some fine-grained dissem py in phyllitic seds.

JL-00-10	Sample of green Cr-Ni (-altered?) Brown dike. Thin lensey QV, dissem py.
JL-00-11	Sample of FSQ in immediate FW of brown dike, thin (mm scale) qtz-dol veins.
JL-00-12	Sample of pyritic footwall edge of 80 cm QV in FW of brown dike.
JL-00-13	Sample of thin limonitic QV in hematitic FSQ. Fracture zone is ~1 m wide
JL-00-14	HW QV to JL-00-13 zone. <5 to 15 cm wide, some good limonite - may be carbonate.
JL-00-15	Float. Brecciated seds and QV with abundant oxidized pyrite. Pyrite cubes weathered out. Seds are sheared, micaceous and phyllitic.
JL-00-16	Quartz-chlorite altered, sheared seds. May be part of or proximal to a fault. Concentrated trains of fine, medium and coarse-grained py. Mostly white, some limonitic quartz.
JL-00-17	Strongly limonitic QV with oxidized py.
JL-00-18	Quartz vein breccia; brecciated white FSQ with dissem py in QV.
JL-00-19	Pyritic, strongly dark red-brown limonitic sheared silty argillite. May be related to steep 008/85W structure.
JL-00-20	Small sone of stronger limonite, oxidized pyrite in FSQ.
JL-00-21	FSQ, dissem py, thin limonitic QV, some open space Qtz crystals.
JL-00-22	QV bx in whitish FSQ. Bleached alteration with veinlets of quartz-limonite. Some brown oxidation, possibly dolomite. Dissem py.
JL-00-23	Dissem py in limonitic FSQ; QV-dol bx.
JL-00-24	Coarse py in banded QV. Py mostly oxidized out.
JL-00-25	Vuggy, irregular limonitic 'pods' in altered FSQ. Bedrock is hematite, limonite altered - part of N-S zone of stronger alteration.

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GEOCHEMICAL ANALYSIS CERTIFICATE

National Gold Corporation File # A004105

600 - 890 W. Pender St., Vancouver BC V6C 1K4 Submitted by: C. Kennedy

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	Al %	Na %	K %	W ppm	Zr ppm	Sn ppm	Y ppm	Nb ppm	Be ppm	Sc ppm	Au* ppb
JJL-01	<2	108	33	62	<.5	273	61	1101	8.19	5	<10	<4	<2	284	<.4	<5	<5	256	6.84	.155	19	590	5.12	166	.30	3.83	.13	1.53	<4	21	<2	10	4	1	25	196.5
JJL-02	6	6	11	12	<.5	22	2	123	.91	<5	<10	<4	<2	10	<.4	<5	<5	18	.42	.135	5	41	.35	23	.01	.47	.07	.19	<4	19	<2	2	<2	<1	2	9.7
JJL-03	<2	96	12	41	<.5	129	29	1060	5.47	<5	<10	<4	2	94	<.4	<5	<5	181	7.26	.037	13	255	4.26	85	.13	3.37	.09	1.58	<4	10	<2	7	2	1	16	104.1
JJL-04	3	19	9	64	<.5	67	25	409	5.86	<5	<10	<4	5	23	<.4	<5	<5	198	1.65	.025	23	86	4.74	291	.08	7.67	.52	2.36	<4	15	2	4	<2	1	28	2.7
JJL-05	5	1227	72	29	1.1	4	2	328	1.38	<5	<10	<4	<2	41	.7	<5	<5	20	1.31	.005	5	39	.30	19	.01	.21	.04	.11	11	21	<2	<2	<2	<1	7	156.6
JJL-06	5	18	7	24	1.2	88	32	546	4.09	<5	<10	<4	2	215	.7	<5	<5	66	5.03	.057	14	87	3.51	88	.05	1.37	.05	.80	<4	13	<2	6	<2	<1	8	1056.6
JJL-07	5	10	<5	18	<.5	26	5	354	2.81	<5	<10	<4	<2	11	<.4	<5	<5	51	.35	.012	3	71	2.31	52	.02	1.15	.04	.59	12	15	<2	<2	<2	<1	9	71.1
JJL-08	6	113	<5	15	<.5	27	24	354	2.71	8	<10	<4	<2	34	<.4	<5	<5	74	1.58	.016	7	62	2.04	109	.04	1.43	.04	.76	<4	8	<2	2	<2	<1	6	333.4
JJL-09	4	4	<5	20	<.5	55	12	621	5.71	<5	<10	<4	<2	15	<.4	<5	<5	101	.49	.028	8	176	5.57	72	.04	2.37	.04	1.22	10	16	<2	2	<2	1	12	533.4
JJL-10	6	83	<5	6	<.5	188	37	112	1.34	<5	<10	<4	<2	3	<.4	<5	<5	13	.09	.010	11	20	.19	17	<.01	.47	.02	.15	<4	5	<2	<2	<2	<1	2	15.1
JJL-11	5	3	5	19	<.5	94	25	583	6.04	<5	<10	<4	<2	10	<.4	<5	<5	5	.12	.022	2	34	4.56	43	.01	.31	.02	.16	13	6	<2	2	<2	<1	5	11.0
RE JJL-11	5	2	<5	19	<.5	95	25	606	6.18	5	<10	<4	<2	10	<.4	<5	<5	4	.13	.022	2	33	4.74	44	.01	.32	.02	.16	13	6	<2	2	<2	<1	5	7.8
STANDARD CT3/DS2	28	70	41	182	5.3	38	12	1028	4.39	61	24	<4	28	247	23.8	24	21	141	1.68	.101	29	279	.96	1079	.41	7.11	2.03	2.01	29	46	22	13	17	5	12	205.4
STANDARD G-2	2	3	22	54	<.5	7	4	824	2.60	<5	<10	<4	7	860	<.4	<5	<5	64	3.09	.101	29	81	.75	1100	.27	8.46	2.98	3.24	<4	9	2	15	21	3	8	-

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS.
- SAMPLE TYPE: ROCK R150 60C AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: OCT 17 2000 **DATE REPORT MAILED:** Oct 31/00 **SIGNED BY** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

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Data ✓ FA ____

ACME ANAL[illegible]AL LABORATORIES LTD. 852 E. HASTINGS ST. VA[illegible]UVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)[illegible]-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

National Gold Corporation File # A004509

600 - 890 W. Pender St., Vancouver BC V6C 1K4

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
JJL-12	61	8	70	41	.6	23	10	198	1.96	40	<8	<2	5	4	.3	3	<3	4	.05	.009	21	22	.02	29	<.01	5	.18	.01	.15	4	65.1
JJL-13	4	3	53	5	<.3	18	6	38	2.53	87	<8	<2	21	3	<.2	<3	<3	8	.02	.012	25	16	.03	60	<.01	5	.46	.01	.34	5	20.5
JJL-14	6	27	22	51	<.3	10	<1	131	1.49	13	<8	<2	4	2	.3	4	<3	3	.01	.006	5	24	.02	19	<.01	<3	.15	<.01	.13	3	5.2
JJL-15	7	6	13	5	<.3	8	1	63	.57	9	<8	<2	2	3	<.2	<3	<3	3	.01	.002	5	34	<.01	9	<.01	5	.07	.01	.05	13	1.4
JJL-16	4	18	4	7	<.3	11	11	49	.49	3	9	<2	5	1	<.2	<3	<3	2	.01	.008	5	20	<.01	6	<.01	6	.08	.01	.03	3	1.1
JJL-17	5	19	9	7	<.3	10	17	70	.72	4	<8	<2	13	3	<.2	<3	<3	1	.03	.021	3	32	.01	12	<.01	<3	.20	.04	.04	11	.3
JJL-18	5	20	11	12	<.3	14	9	49	.90	9	<8	<2	2	2	<.2	<3	<3	3	.01	.007	9	22	.01	11	<.01	<3	.10	<.01	.07	<2	.3
JJL-19	6	4	11	5	<.3	11	6	63	1.03	8	<8	<2	2	2	<.2	<3	<3	2	.01	.003	6	33	.01	13	<.01	5	.10	.01	.08	14	2.4
JJL-20	6	19	2487	45	2.2	12	5	52	.62	7	<8	<2	4	3	.8	4	<3	3	<.01	.008	2	25	.01	10	<.01	6	.09	<.01	.07	<2	6.1
JJL-21	7	182	67	35	3.1	6	4	87	.93	63	<8	<2	2	11	1.2	17	<3	2	.11	.007	7	33	.03	18	<.01	<3	.08	<.01	.06	15	7.3
JJL-22	274	24	1228	29	1.6	62	63	299	4.41	34	<8	<2	8	122	.4	4	<3	17	.53	.264	20	35	.07	125	<.01	<3	.29	.01	.32	<2	584.0
JJL-23	9	6	9	18	<.3	29	23	345	1.83	6	<8	<2	2	49	.5	<3	<3	<1	2.21	.021	7	30	1.00	21	<.01	5	.08	.01	.06	11	125.9
JJL-24	7	29	67	8	.3	30	88	135	1.27	5	<8	<2	3	31	.2	<3	<3	<1	.64	.020	2	24	.26	10	<.01	3	.10	.02	.05	2	17.1
JJL-25	5	4	6	6	<.3	9	13	68	1.31	2	<8	<2	3	2	<.2	<3	<3	3	.02	.012	11	31	.01	7	<.01	4	.09	.04	.02	12	4.1
JJL-26	4	6	6	11	<.3	11	3	349	1.66	<2	<8	<2	2	64	.4	<3	<3	1	2.09	.009	4	21	.84	13	<.01	<3	.07	.03	.03	<2	108.2
JJL-27	<1	77	3	42	<.3	677	61	2057	8.39	9	12	<2	<2	191	.2	<3	<3	56	7.03	.132	8	288	5.49	7	.01	<3	1.01	.01	.08	2	6.2
JJL-28	4	7	<3	4	<.3	31	43	88	1.94	5	<8	<2	6	4	<.2	<3	<3	3	.04	.024	12	17	.04	9	<.01	<3	.16	.07	.04	<2	7.1
JJL-29	6	6	<3	16	<.3	19	10	288	2.02	2	<8	<2	2	6	<.2	<3	<3	3	.11	.025	5	27	.04	37	<.01	3	.14	.01	.11	11	1.4
JJL-30	6	5	<3	4	<.3	11	3	54	.85	18	<8	<2	<2	2	<.2	<3	<3	4	.01	.006	2	30	.08	5	<.01	3	.08	.01	.01	<2	8.4
RE JJL-30	6	6	<3	3	<.3	12	3	55	.86	19	<8	<2	<2	2	<.2	<3	<3	6	.01	.006	3	38	.08	5	<.01	3	.09	.01	.01	2	7.2
JJL-31	6	1146	77	18	3.2	28	17	88	1.39	71	<8	<2	4	3	<.2	<3	<3	6	.06	.035	7	40	.35	22	<.01	4	.44	.01	.10	11	24.1
JJL-32	7	24	5	7	<.3	18	20	56	1.32	5	<8	<2	<2	1	<.2	<3	<3	3	<.01	.007	<1	26	.01	7	<.01	4	.04	.01	.03	4	32.3
JJL-33	6	15	9	4	<.3	11	3	70	.93	2	<8	<2	<2	1	<.2	<3	<3	2	<.01	.006	<1	35	.01	5	<.01	4	.02	<.01	.01	15	2.3
JJL-34	5	113	11	53	<.3	425	86	1441	13.53	359	26	<2	<2	87	.7	<3	<3	64	4.21	.009	2	71	1.26	41	<.01	<3	.03	.01	.02	3	4.4
STANDARD C3/DS2	26	61	37	169	5.3	36	11	749	3.30	55	20	4	21	28	21.9	18	22	76	.55	.093	19	162	.59	145	.08	21	1.79	.04	.16	17	197.3
STANDARD G-2	1	4	3	45	<.3	8	4	518	1.99	<2	<8	<2	4	70	<.2	<3	3	37	.62	.102	8	75	.58	215	.13	4	.91	.08	.46	3	-

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 7 2000 **DATE REPORT MAILED:** Nov 20/00 **SIGNED BY** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data ✓ FA ____

ACME A[illegible]TICAL LABORATORIES LTD. 852 E. HASTINGS ST. VAN[illegible]VER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253[illegible]16
(I[illegible] 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

National Gold Corporation File # A004747 Page 1

600 - 890 W. Pender St., Vancouver BC V6C 1K4

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
DW 00-1	4	8	5	5	<.3	5	4	222	1.68	<2	<8	<2	3	56	<.2	<3	<3	<1	1.05	.012	10	19	.42	29	<.01	<3	.19	.01	.16	7	1.4
JL 00-2	5	804	13	13	.6	21	36	232	2.12	2	<8	<2	2	11	<.2	<3	3	2	.26	.048	4	16	.42	19	<.01	3	.25	.02	.17	2	86.4
JL 00-3	6	2084	11	11	.3	37	20	232	1.11	4	<8	<2	3	6	.5	<3	<3	4	.16	.011	8	25	.06	34	<.01	3	.21	.01	.16	8	486.8
JL 00-4	5	21	6	20	<.3	33	16	492	2.96	<2	<8	<2	4	70	.2	<3	<3	2	2.38	.023	3	16	1.35	46	<.01	4	.19	.01	.16	6	522.4
JL 00-5	5	112	3	14	<.3	22	11	147	1.76	<2	<8	<2	5	15	<.2	<3	<3	2	.53	.037	9	25	.14	130	<.01	5	.25	.03	.17	8	9.7
JL 00-6	2	95	3	23	<.3	41	11	165	3.02	<2	<8	<2	11	32	<.2	<3	<3	3	.59	.032	22	16	.48	99	<.01	3	.36	.01	.27	3	2.7
JL 00-7	2	114	<3	64	<.3	59	41	1139	8.19	4	<8	<2	<2	143	.9	<3	<3	30	5.00	.132	8	22	3.35	195	<.01	<3	.26	.04	.14	2	612.6
JL 00-8	4	5	29	16	<.3	20	32	63	4.23	7	<8	<2	10	8	<.2	<3	<3	4	.08	.045	21	14	.05	67	<.01	5	.29	.04	.19	4	38.6
JL 00-9	3	75	5	11	<.3	28	36	566	3.21	4	<8	<2	3	131	<.2	<3	<3	1	3.43	.179	5	19	1.61	194	<.01	10	.24	.03	.17	6	6.7
JL 00-10	<1	5	3	52	<.3	584	45	1328	9.13	5	<8	<2	3	106	.6	<3	<3	21	4.38	.105	7	147	6.50	16	<.01	<3	.32	.03	.16	<2	2.0
JL 00-11	5	3	<3	5	<.3	9	4	116	.89	<2	<8	<2	4	18	<.2	<3	<3	1	.45	.028	8	24	.22	11	<.01	6	.10	.06	.02	5	<.2
JL 00-12	10	8	8	11	<.3	23	11	85	2.20	19	<8	<2	7	3	<.2	<3	<3	4	.02	.005	16	27	.03	32	<.01	6	.18	.01	.13	4	8.2
JL 00-13	4	4	5	16	<.3	23	7	104	1.26	4	<8	<2	7	4	<.2	<3	<3	3	.08	.037	14	26	.04	14	<.01	<3	.17	.06	.04	7	.3
JL 00-14	4	10	4	14	<.3	21	4	215	1.59	2	<8	<2	3	6	<.2	<3	<3	2	.08	.005	6	28	.07	29	<.01	<3	.10	.01	.07	6	<.2
JL 00-15	7	27	150	7	1.2	15	5	78	3.03	46	<8	<2	2	1	<.2	<3	3	4	.01	.015	3	32	.01	15	<.01	3	.12	.01	.08	12	22.2
JL 00-16	3	3	5	2	<.3	33	124	36	4.69	27	<8	<2	2	2	<.2	<3	<3	9	.01	.010	4	25	.19	51	<.01	4	.30	.01	.06	5	6.7
JL 00-17	6	6	4	4	<.3	13	20	61	2.16	9	<8	<2	<2	2	<.2	<3	<3	2	.01	.010	<1	32	.10	27	<.01	<3	.15	.01	.05	12	1.0
JL 00-18	5	2	<3	1	<.3	29	24	51	.99	16	<8	<2	2	1	<.2	<3	<3	1	.01	.007	2	30	.01	11	<.01	4	.07	.02	.03	7	.5
JL 00-19	3	16	<3	4	<.3	12	3	130	5.36	<2	<8	<2	8	3	<.2	<3	<3	5	.03	.022	18	20	.03	78	<.01	3	.36	.01	.24	4	<.2
JL 00-20	4	3	5	2	<.3	19	18	43	3.02	<2	<8	<2	3	1	<.2	<3	<3	2	.01	.011	<1	25	.01	40	<.01	3	.09	.01	.05	5	5.1
JL 00-21	7	3	<3	6	<.3	37	25	142	1.29	4	<8	<2	2	1	<.2	<3	<3	4	.02	.008	5	33	.26	21	<.01	4	.33	.04	.03	10	<.2
JL 00-22	7	6	3	13	<.3	29	6	158	1.38	<2	<8	<2	7	10	.2	<3	<3	3	.28	.026	36	23	.11	29	<.01	<3	.14	.07	.05	4	76.5
JL 00-23	4	2	3	4	<.3	13	49	340	1.30	<2	<8	<2	<2	20	<.2	<3	<3	2	1.02	.134	2	19	.27	43	<.01	5	.18	.15	.02	4	1.4
JL 00-24	4	6	<3	2	<.3	11	37	101	3.62	62	<8	<2	<2	2	<.2	<3	<3	2	.01	.013	7	24	.01	23	<.01	3	.08	.01	.05	8	9.4
JL 00-25	9	7	10	5	<.3	51	79	248	10.47	15	<8	<2	2	2	.2	<3	<3	3	.02	.026	3	27	.03	28	<.01	3	.14	.01	.07	9	5.5
RE JL 00-25	9	7	5	4	<.3	49	76	241	10.21	16	<8	<2	2	2	<.2	<3	<3	3	.02	.026	4	26	.03	27	<.01	<3	.14	.01	.07	9	5.8
JJL-35	1	7	3	26	<.3	72	36	1344	5.85	7	<8	<2	<2	595	.8	<3	<3	69	10.89	.131	9	87	4.27	57	.01	<3	.89	.01	.19	3	1.3
JJL-36	6	7	33	3	<.3	9	4	82	1.16	11	<8	<2	4	6	<.2	<3	<3	1	.20	.013	9	38	.02	19	<.01	3	.09	.01	.06	11	7.3
JJL-37	5	2	<3	5	<.3	6	1	99	1.36	<2	<8	<2	<2	1	<.2	<3	<3	2	.01	.007	<1	24	.01	7	<.01	4	.04	.01	.02	6	.6
JJL-38	9	4	6	4	<.3	10	3	107	1.23	7	<8	<2	<2	2	<.2	<3	<3	1	.01	.007	1	41	.02	10	<.01	4	.04	<.01	.03	16	5.7
JJL-39	5	3	<3	1	<.3	5	2	39	1.23	<2	<8	<2	<2	2	<.2	<3	<3	1	<.01	.007	<1	28	<.01	9	<.01	4	.02	<.01	.03	7	5.1
JJL-40	7	706	180	9	2.3	821	64	148	5.72	215	<8	<2	<2	6	<.2	<3	3	14	.11	.008	<1	37	.07	4	<.01	4	.10	.01	.05	11	137.3
JJL-41	3	8	622	426	.6	22	11	153	2.42	4	<8	<2	9	18	5.5	<3	<3	3	.63	.022	17	20	.13	48	<.01	<3	.35	<.01	.33	5	2.7
STANDARD C3/DS2	26	68	42	173	5.5	40	12	804	3.55	58	20	2	23	30	23.9	16	24	80	.59	.096	19	176	.63	154	.09	22	1.82	.04	.18	19	197.4
STANDARD G-2	2	3	4	43	<.3	9	4	545	2.13	<2	<8	<2	4	72	<.2	<3	<3	39	.64	.103	7	76	.60	228	.13	<3	.93	.07	.48	4	-

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C   AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: NOV 24 2000 **DATE REPORT MAILED:** Dec 8/00 **SIGNED BY** C. L. ......D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Data ✓ FA ___

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
JJL-42	6	2222	5	5	<.3	16	33	46	.47	3	<8	<2	3	3	<.2	<3	<3	<1	.02	.005	1	28	.01	3	<.01	3	.09	.02	.02	7	2.6
JJL-43	7	2657	3	3	.7	18	12	44	.68	22	<8	<2	3	1	<.2	<3	<3	2	.01	.006	5	30	.01	12	<.01	<3	.09	.01	.07	11	6.5
JJL-44	3	278	225	59	.5	18	13	803	2.51	2	<8	<2	<2	65	.8	<3	14	<1	4.10	.008	1	19	1.20	17	<.01	<3	.12	.01	.05	4	3.9
JJL-45	7	7834	75	23	1.2	68	53	1040	3.29	14	<8	<2	<2	69	.3	<3	34	<1	3.94	.002	1	32	1.50	4	<.01	<3	.07	.01	.02	11	56.1
JJL-46	3	27	1648	8	.6	5	4	1111	1.99	5	<8	<2	<2	296	.3	<3	<3	<1	12.08	.026	2	11	1.38	13	<.01	4	.03	.01	.03	2	2.6
JJL-47	<1	217	13	21	<.3	42	31	431	7.04	6	<8	<2	<2	72	.5	<3	<3	77	3.26	.263	10	35	3.44	18	.01	<3	2.83	.04	.13	<2	1.9
JJL-48	4	4	22	8	<.3	45	9	84	1.62	<2	<8	<2	7	8	<.2	<3	<3	7	.25	.012	10	25	.53	14	<.01	5	.28	.04	.10	5	.8
JJL-49	5	9	4	5	<.3	13	5	242	1.10	<2	<8	<2	6	7	<.2	<3	<3	2	.20	.010	30	27	.12	28	<.01	3	.19	.07	.04	8	3.3
JJL-50	2	17	106	11	<.3	59	13	719	4.18	14	<8	<2	6	109	<.2	<3	<3	1	1.85	.022	19	13	.88	19	<.01	3	.15	.08	.04	2	1.3
JJL-51	<1	3	6	36	<.3	99	12	91	5.02	2	<8	<2	17	9	<.2	<3	<3	4	.22	.034	30	15	2.51	32	<.01	<3	.42	.05	.30	2	4.5
JJL-52	1	15	9	14	<.3	64	6	757	5.51	5	<8	<2	11	83	<.2	<3	<3	7	1.82	.045	34	12	1.14	26	<.01	<3	.30	.07	.13	<2	.7
JJL-53	<1	1	<3	26	<.3	122	19	159	7.20	4	<8	<2	17	6	<.2	<3	<3	13	.22	.060	29	17	3.91	37	<.01	3	.85	.01	.37	2	.4
JJL-54	<1	14	10	39	<.3	74	18	187	4.74	<2	<8	<2	12	53	.3	<3	<3	9	1.20	.076	26	18	1.40	61	<.01	4	.57	.01	.45	<2	16.8
JJL-55	3	3	3	20	<.3	37	6	116	2.63	<2	<8	<2	6	16	<.2	<3	<3	6	.52	.019	4	24	1.37	14	<.01	4	.30	.03	.12	5	1.8
JJL-56	19	65	14	14	57.5	40	8	66	3.22	<2	<8	34	3	15	<.2	<3	8	3	.01	.005	5	28	.03	92	<.01	<3	.08	.01	.07	7	42290.4
JJL-57	10	33	9	2	.8	10	2	47	1.21	20	<8	<2	4	2	<.2	<3	3	1	.03	.004	12	31	.04	20	<.01	<3	.08	.01	.07	9	148.0
JJL-58	10	5	5	3	<.3	9	3	56	1.30	14	<8	<2	<2	6	<.2	<3	<3	3	.06	.003	5	27	.03	12	<.01	4	.08	<.01	.07	8	189.5
JJL-59	3	6	3	11	<.3	107	17	1124	4.63	2	<8	<2	<2	172	.4	<3	<3	59	8.69	.043	10	176	5.02	36	<.01	<3	.91	.01	.04	3	29.0
JJL-60	4	2	31	27	.5	38	23	296	3.06	17	<8	<2	<2	57	<.2	<3	<3	16	2.17	.106	4	26	2.06	23	<.01	3	.32	.01	.20	3	95.0
JJL-61	3	1	19	13	<.3	36	14	447	2.81	2	<8	<2	<2	192	.7	<3	<3	17	6.26	.112	1	23	2.77	13	<.01	5	.11	.05	.03	3	129.0
JJL-62	6	2	<3	2	<.3	8	3	72	1.04	11	<8	<2	<2	4	<.2	<3	<3	1	.07	.014	1	31	.02	8	<.01	<3	.04	.01	.02	6	39.5
JJL-63	6	3	<3	2	<.3	7	8	69	.61	<2	<8	<2	34	6	<.2	<3	4	5	.39	.084	2	31	.13	7	<.01	<3	.16	.06	.05	6	10.1
JJL-64	3	4	31	6	<.3	14	6	1469	3.74	<2	<8	<2	<2	159	.3	<3	<3	5	8.28	.060	1	19	3.86	11	<.01	<3	.10	.03	.04	2	14.1
JJL-65	7	53	21	3	.5	76	242	79	3.96	186	<8	<2	2	4	<.2	<3	3	3	.03	.017	1	27	.02	16	<.01	4	.16	.07	.06	9	43.9
JJL-66	2	1	<3	1	<.3	6	1	800	2.22	<2	<8	<2	2	76	<.2	<3	<3	4	6.41	.007	5	14	3.07	6	<.01	<3	.09	.02	.06	3	6.0
JJL-67	7	6	<3	8	<.3	9	10	59	1.30	8	<8	<2	2	1	<.2	<3	<3	2	.01	.004	4	35	.01	7	<.01	<3	.08	.01	.06	12	5.9
JJL-68	5	40	4	8	.6	6	5	50	1.49	25	<8	<2	<2	1	<.2	5	<3	1	.01	.006	3	27	.01	8	<.01	3	.07	.01	.06	7	15.0
JJL-69	9	4	5	9	<.3	6	2	83	1.14	8	<8	<2	<2	<1	<.2	<3	3	<1	<.01	.004	1	39	.01	5	<.01	<3	.03	<.01	.02	14	13.6
JJL-70	5	1	3	13	<.3	21	3	366	1.61	4	<8	<2	<2	63	.2	<3	<3	<1	1.11	.017	2	28	.54	15	<.01	4	.04	<.01	.03	7	3.3
RE JJL-70	5	1	<3	13	<.3	20	2	357	1.58	3	<8	<2	<2	61	.2	<3	<3	<1	1.07	.016	2	28	.53	14	<.01	<3	.04	<.01	.02	7	2.9
JJL-71	6	3	7	14	<.3	72	12	719	2.71	<2	<8	<2	<2	264	.5	<3	<3	9	3.63	.096	9	65	1.79	29	.01	<3	.26	.02	.21	6	11.1
JJL-72	2	4	13	46	<.3	194	28	1804	6.27	34	<8	<2	<2	522	.9	<3	<3	6	6.81	.066	5	31	3.66	41	<.01	<3	.09	.01	.07	3	2.8
JJL-73	6	4	<3	5	<.3	19	4	680	2.63	4	<8	<2	3	85	<.2	<3	<3	<1	3.85	.007	8	28	1.55	18	<.01	<3	.04	.01	.04	9	2.1
JJL-74	5	2	<3	7	<.3	23	4	100	.84	13	<8	<2	2	2	<.2	<3	<3	1	.02	.009	7	28	.03	12	<.01	3	.05	<.01	.03	7	2.1
STANDARD C3/DS2	26	66	34	168	5.7	40	12	793	3.49	56	20	3	22	30	23.6	18	26	80	.58	.096	19	174	.61	153	.09	23	1.79	.04	.17	16	211.8
STANDARD G-2	2	4	3	41	<.3	9	4	541	2.10	<2	<8	<2	5	74	<.2	<3	<3	39	.65	.100	8	79	.59	228	.12	<3	.92	.07	.48	3	-

Sample type: ROCK R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
JJL-75	4	663	775	7	2.2	10	4	203	1.50	<2	<8	<2	2	155	.4	<3	5	<1	1.02	.025	5	26	.44	43	<.01	<3	.20	.01	.20	6	40.5
JJL-76	7	367	15	5	<.3	198	64	68	4.79	148	<8	<2	4	7	<.2	<3	5	9	.05	.031	16	35	.17	30	.01	3	.38	.02	.14	7	60.7
JJL-77	6	130	15	3	1.0	23	21	92	.84	30	<8	<2	<2	14	<.2	<3	5	1	.13	.007	5	31	.05	15	<.01	3	.03	.01	.02	7	52.0
JJL-78	6	162	2377	304	7.0	32	9	313	2.85	12	<8	<2	2	423	4.5	<3	8	<1	3.27	.061	3	30	1.49	33	<.01	<3	.08	.02	.07	9	67.0
JJL-79	6	5	7	2	<.3	26	21	47	.92	7	<8	<2	<2	1	<.2	<3	<3	2	.01	.004	5	31	.01	11	<.01	3	.05	<.01	.03	7	13.3
JJL-80	2	1	8	4	<.3	13	4	664	2.07	<2	<8	<2	4	138	<.2	<3	<3	<1	6.67	.009	10	17	3.13	16	<.01	<3	.07	.06	.02	2	2.5
JJL-81	2	1	<3	2	<.3	3	3	27	.63	<2	<8	<2	4	3	<.2	<3	<3	1	.02	.012	20	11	.01	16	<.01	<3	.17	.16	.02	<2	.8
JJL-82	6	3	4	2	<.3	18	3	64	1.62	<2	<8	<2	<2	2	<.2	<3	<3	3	.02	.006	<1	38	.25	11	<.01	<3	.26	.01	.04	15	<.2
JJL-83	5	3506	8	3	9.9	35	11	64	4.40	9	<8	<2	<2	1	<.2	<3	4	4	.03	.014	1	51	.09	6	<.01	3	.13	.01	.04	7	117.6
JJL-84	69	437	538	10	4.5	19	15	188	2.28	2	<8	<2	<2	214	.5	<3	<3	<1	1.45	.033	3	32	.70	39	<.01	5	.07	.01	.03	12	1570.6
JJL-85	4	35	93	20	<.3	18	6	729	1.33	4	<8	<2	2	28	<.2	<3	<3	<1	2.83	.016	7	24	.44	49	<.01	7	.20	.01	.12	6	25.5
JJL-86	6	73	27	2	1.0	128	10	65	2.08	321	<8	<2	<2	2	<.2	27	<3	3	.02	.020	<1	34	.12	5	<.01	4	.18	.01	.02	7	12.8
JJL-87	4	4	3	14	<.3	33	5	76	3.03	4	<8	<2	2	9	<.2	<3	<3	<1	.34	.010	12	28	1.82	13	<.01	<3	.62	.01	.15	6	6.8
JJL-88	2	10	<3	8	<.3	65	19	608	2.58	5	<8	<2	<2	46	<.2	<3	<3	27	4.89	.011	2	259	2.94	9	<.01	<3	.77	.01	.03	3	4.1
JJL-89	9	7	<3	1	<.3	6	1	58	1.29	32	<8	<2	<2	3	<.2	<3	<3	1	.01	.006	2	36	.01	6	<.01	<3	.04	.01	.03	14	183.7
JJL-90	4	17	<3	2	<.3	11	6	44	2.17	54	<8	<2	5	2	<.2	<3	<3	3	.01	.007	7	25	.02	25	<.01	3	.15	.01	.11	3	84.1
JJL-91	6	131	59	7	.6	49	16	901	3.16	6	9	<2	<2	109	<.2	<3	<3	1	1.43	.041	3	35	.79	26	<.01	<3	.51	.02	.05	10	9.8
JJL-92	<1	132	<3	22	<.3	46	30	1084	5.18	9	<8	<2	<2	94	.3	<3	<3	13	7.93	.029	2	25	3.36	16	<.01	<3	.35	.03	.21	<2	14.1
JJL-93	<1	3	10	5	<.3	16	16	591	7.60	8	9	<2	<2	199	.6	<3	<3	47	10.23	.217	7	3	5.51	16	<.01	<3	.43	.02	.24	<2	3.3
JJL-94	4	4	<3	1	<.3	8	10	131	1.62	<2	<8	<2	<2	2	<.2	<3	<3	2	.04	.003	2	25	.06	11	<.01	<3	.14	.01	.03	5	1.1
JJL-95	8	10	<3	1	<.3	7	5	54	2.11	9	<8	<2	<2	2	<.2	<3	<3	3	.02	.005	1	34	.01	4	<.01	<3	.07	.01	.04	14	173.4
JJL-96	4	4	<3	2	<.3	4	7	46	2.10	4	<8	<2	<2	2	<.2	<3	<3	4	.01	.009	4	22	.02	7	<.01	3	.22	.01	.13	5	2.1
JJL-97	5	4	<3	5	<.3	9	30	68	2.29	5	<8	<2	<2	2	<.2	<3	<3	1	.02	.008	2	27	.02	8	<.01	4	.14	.01	.07	10	3.1
JJL-98	3	1958	<3	2	1.7	7	1	76	1.80	<2	<8	<2	<2	2	<.2	<3	<3	2	.22	.009	8	26	.14	4	<.01	<3	.13	.02	.02	6	18.4
JJL-99	4	4249	<3	3	.5	5	3	283	1.35	<2	<8	<2	<2	48	<.2	<3	<3	3	4.07	.373	8	20	.03	9	<.01	<3	.12	.12	<.01	4	25.9
JJL-100	4	249	6	6	<.3	15	56	179	6.64	3	<8	<2	<2	36	<.2	<3	<3	103	1.14	.552	20	10	.04	8	.05	<3	.24	.14	.02	2	76.2
RE JJL-100	3	248	3	7	<.3	16	55	178	6.60	3	<8	<2	<2	36	<.2	<3	<3	103	1.14	.551	20	10	.04	8	.05	4	.24	.14	.02	<2	95.7
JJL-101	3	339	<3	6	<.3	29	41	140	4.23	<2	<8	<2	<2	30	<.2	<3	3	20	1.01	.560	12	9	.03	12	.01	4	.21	.13	.02	2	451.6
JJL-102	5	24	<3	1	<.3	6	1	122	1.13	13	<8	<2	<2	2	<.2	<3	27	2	.01	.010	3	26	<.01	22	<.01	<3	.06	.01	.03	6	972.3
JJL-103	8	280	9	14	<.3	54	26	404	8.64	8	15	<2	<2	3	<.2	4	<3	9	.03	.021	3	37	.03	34	<.01	4	.30	.02	.13	11	35.7
JJL-104	4	66	<3	2	<.3	5	1	72	1.94	24	<8	<2	<2	1	<.2	<3	12	3	.01	.008	19	27	.01	15	<.01	4	.11	.01	.07	5	58.7
JJL-105	8	117	5	2	.3	8	2	55	1.58	47	<8	<2	<2	4	<.2	<3	25	4	.01	.006	8	33	.01	6	<.01	3	.09	.01	.05	11	4289.2
JJL-106	4	13	<3	12	<.3	73	21	369	5.17	79	8	<2	<2	3	<.2	<3	3	4	.03	.009	4	30	.29	13	<.01	<3	.13	.01	.08	6	56.4
STANDARD DS2	25	67	35	174	5.4	40	11	781	3.46	59	21	3	22	30	23.3	17	24	77	.57	.095	19	172	.61	150	.09	20	1.81	.04	.17	18	219.7

Sample type: ROCK R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ___

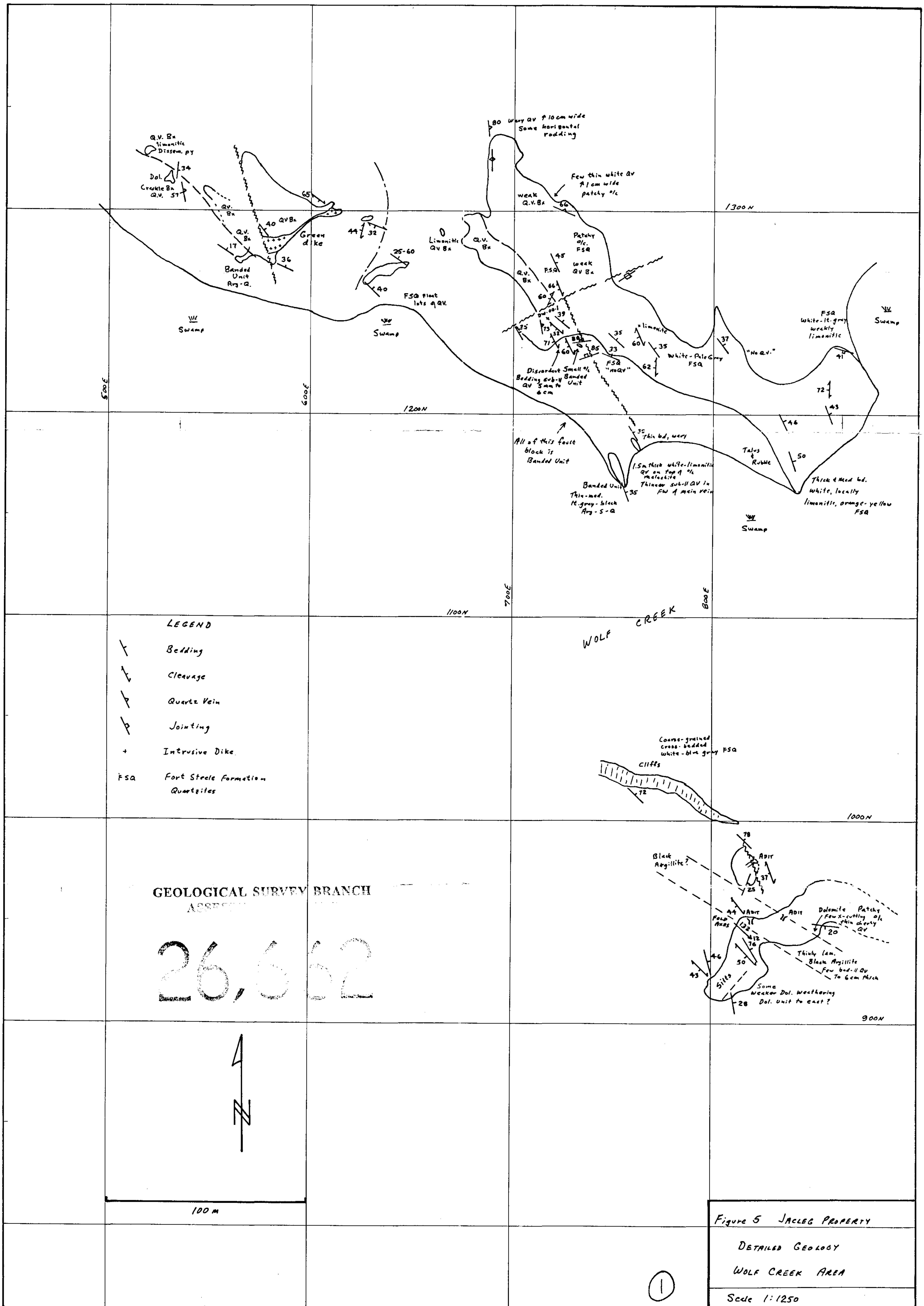

Figure 5 JACLEG PROPERTY

DETAILED GEOLOGY

WOLF CREEK AREA

Scale 1:1250


1500E
1600E
1700E
1800E
1900E
2000E
2100E
2200E
2300E
2600N
2500N
2400N
2300N
2200N
2100N
Banded Unit
Copper King Workings
Chloritic Siltstone
100 m
LEGEND
Bedding
Cleavage
Quartz Vein
Jointing
Intrusive Dike
Gabbro
Breccia
FSQ Fort Steele Formation Quartzites
GEOLOGICAL
26,
Figure 6 JACLEG PROPERTY
DETAILED GEOLOGY
JACLEG SHOWING AREA
2
Scale 1:1000

Figure 3. Jacleg Property Prospecting Map Scale 1:10,000